

'Window boxes' grow bay grass for restoration Decline of resource draws attention

By Stephen Manning Associated Press Writer
June 6, 2005

SILVER SPRING, Md. -- A carpet of tightly bunched strands of deep green bay grass grows thickly in the water, spreading across the surface to sprawl in the sun.

The conditions are ideal -- a steady bubble of warm salt water bathes the aquatic garden, a thick layer of sand and soil provides a sturdy base for roots and a constant source of light shines down.

But the sago pondweed is growing far from its habitat in the Chesapeake Bay. It is planted in litter boxes submerged in a plastic tank used for mixing concrete,



Sago pondweed grows in a container next to a window of the National Oceanic and Atmospheric Administration in Silver Spring, Md.

perched in front of a broad window on the 13th floor of the National Oceanic and Atmospheric Administration. Instead of sprouting in the bay, it overlooks the urban core of Silver Spring, under the care of Paul Tyler.

"I check the water level, clean the algae -- it's pretty easy," said Tyler, a member of NOAA's communication and education department who doubles as head gardener for the tank, one of 16 spread around NOAA's headquarters. "That's the best tank here."

The NOAA project is among several statewide that encourage residents to grow bay grass at home, school or work for later planting in the bay and its tributaries. While the amount grown is dwarfed by the shortage of bay grass, biologists hope to raise awareness of the steep decline of a critical bay resource.

"We're not going to fix the bay," said Alison Hammer, a scientist with NOAA's National Ocean Service who is organizing a trip to plant the grass June 14 in the bay at Webster Naval Air Field in St. Mary's County. Getting people involved in restoring bay grass "may be more worthwhile than the actual planting of the grass," she said.

Getting started

Fifteen types of bay grass, also known as submerged aquatic vegetation, are commonly found along the shoreline of the Chesapeake and the rivers that feed it. Some are native, while others are invasive species transported from other regions. The grasses are important for other marine life because they filter the water, prevent erosion and offer shelter for creatures such as crabs.

About 200,000 acres of the bay were once covered by underwater grasses, but nitrogen pollution and sediment washing into the water and blocking sunlight considerably thinned the grassbeds. By last year, only 65,000 acres of grass remained.

A recent report by federal and state researchers suggests grass acreage has increased to about 73,000 acres, with much of the growth in the upper portion of the bay north of the Susquehanna River. But lower regions continue to see a

Get involved

NOAA bay grass site

<http://noaa.chesapeakebay.net/sav.htm>

Chesapeake Bay Foundation - Grasses for Masses

www.cbf.org/site/PageServer?pagenameaction--outdoors--grasses--grow--plant&AddInterest1022

decline of grassbeds and the bay is well short of a goal, set by states in the Chesapeake watershed, of 185,000 acres by 2010.

Several years ago, the Chesapeake Bay Foundation began a program where students grow bay grasses in tanks in classrooms, a project funded in part by NOAA.

That was later expanded to the "Grasses for Masses" project for anyone who wanted to take part in bay grass planting. For a small fee, CBF will provide a tank, soil, a water heater, lamps and grass seeds. The foundation offers tutorials on cultivating bay grass, such as keeping the salinity and water temperature at the appropriate level, as well as how to keep the tank free of slimy algae. Trips are held in the spring to plant the grass.

About 200 people in Maryland are growing bay grass this year, with about the same amount taking part in Virginia, according to Marcy Damon, a habitat restoration trainer at CBF. That's up from just a handful a few years ago, she said.

'Part of our faith'

Some bay grass gardening groups are organized through institutions such as churches. CBF trained Corinne Irwin, who runs an environmental program at the Unitarian Universalist Church in Annapolis, to teach bay grass classes. She has about 40 people growing grass, many of them church members.

"It is part of our faith to care for the earth," Irwin said.

Vanelle Jones first grew bay grass several years ago when her daughter's middle school raised a tankful for a class project. The family now has a tank sprouting wild celery in the basement of their Gaithersburg home. Each day Leaton Jones, now 16, checks the water to make sure the plants are healthy.

Last year, the Jones' bay grass suffered, which they suspect was a problem with the seeds. But this year, their crop is healthy.

"Each container is really filled with grasses," said Vanelle Jones. "We are going to have a good production."

NOAA spent about \$1.3 million last year on bay grass research and restoration, according to Stephanie Hunt of NOAA's restoration office. Similar projects to replant underwater vegetation are also under way in places such as Florida, she said.

NOAA's tanks are spread around the agency's massive complex in Silver Spring in offices that include the National Weather Service and NOAA's fisheries unit. There are also tanks at the Washington office of the Commerce Department, NOAA's parent agency, and at the Capitol Hill office of Rep. Benjamin Cardin, D-Md. When the project began four years ago, there were only a total of three tanks.

Hammer's office has about 10 people who tend to the grass tank, set in a corner. They adjust the salinity, scour away algae and watch for new sprouts. Many who work there are scientists who don't spend much time in the field anymore, Hammer said, and they have taken an interest in the project.

"People will say, 'Did you see the grass today? It sprouted,' " she said. "There is a real sense of stewardship."